

**In The Drawings:**

Please substitute the two sheets of drawings submitted herewith containing Figures 3A, 3B, and 4 in place of the originally filed drawing sheets containing the same Figures.

## REMARKS

### Introductory Comments:

Claims 1-20 are pending in the application. Claims 7-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1, 3-5, 7, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Gerth (U. S. Patent No. 5,222,118). Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gerth (U. S. Patent No. 5,222,118) as applied to claim 1 above. Claim 6 is rejected under 35 U.S.C. 103(a) as being obvious over Gerth in view of Cheon (U. S. Patent No. 6,313,990 B1). Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gerth (U. S. Patent No. 5,222,118) as applied to claim 1 above, and further in view of Dilick (U. S. Patent No. 6,254,272 B1). Claims 15-20 are allowed, and the Applicants respectfully request reconsideration of claims 1-14.

### In Response To The Drawing Objections:

Regarding the drawing objections discussed in paragraphs 1-3 of the Office Action, Applicants have amended the drawings in accordance with the Examiner's suggestions such that numbers in the Detailed Description are properly represented in the amended drawings. No new matter has been added. Applicants therefore submit 2 Replacement Sheets containing Figures 3A, 3B, and 4.

Applicants believe that the drawing objections are overcome in view of the aforementioned amendments thereto.

### In Response To The Specification Objections:

The Specification is objected to for various informalities. The Applicants respond to the aforementioned objections by amending paragraphs [0032], [0034], and [0045] of the Detailed Description in accordance with the

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Examiner's suggestions. No new matter has been added. The Applicants therefore believe these objections are hereby overcome.

**In Response To The 35 U.S.C. 112, Second Paragraph Claim Rejections:**

Claims 7-12, which depend from claim 1, are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In response to this rejection, claim 1 is amended to positively claim an x-ray source, in accordance with the Examiner's suggestion, for providing proper antecedent basis for claims 7-12. The Applicants believe that the aforementioned amendment clarifies the original intent of claims 7-12, and that the 35 U.S.C. 112 rejection is hereby overcome.

**In Response To The 35 U.S.C. 102(b) Claim Rejections:**

Claims 1, 3-5, 7, and 13 are rejected under as being anticipated by Gerth. According to the Office Action, Gerth discloses a cooling system for an imaging system comprising: a mounting plate comprising a first side and an opposing second side, the mounting plate further defining at least one opening; at least one "heat conductor" extending through the at least one opening and through at least a portion of a dielectric fluid reservoir defined adjacent the second side of the mounting plate and adapted to enclose an x-ray source; and a heat sink coupled to the first side of the mounting plate, the heat sink receiving at least a portion of the at least one heat conductor.

In response to this rejection, the Applicants amend claim 1 to clarify that the heat conductor in claim 1 conducts heat from the dielectric fluid and not the fluid itself, in accordance with Paragraphs [0033] and [0034]. No new matter has been added. The Applicants believe the amended claim 1 to be new and nonobvious because the claim and the prior art differ.

Gerth includes oil lines 9 and 10 for pumping oil through a container 11 for degasification. (Column 3, Lines 17-34.) In contrast, claim 1 includes heat conductors for transferring heat from the oil to a heat sink, whereby the oil does not travel through the pipes. Although pumping oil, as in Gerth, may arguably move hot oil along the oil lines, the Gerth system requires a pump, as in Column 3, Line 20, for moving any heat moved with the oil. The present invention, on the other hand, merely transfers heat from the oil and does not require the pump system of Gerth. This is advantageous because pumps are subject to substantial wear and often break-down, requiring costly repairs. Therefore, because claim 1 includes heat conductors conducting heat from the dielectric material as opposed to moving the material itself, claim 1 is believed to be new and nonobvious.

Claims 2-14 depend from the amended claim 1 and are believed to be allowable for at least this reason.

**In Response To The 35 U.S.C. 103(a) Claim Rejections:**

Claim 2 is rejected under as being unpatentable over Gerth as applied to claim 1 above. With regard to claim 2, Gerth allegedly discloses the system of claim 1. The Office Action recognizes that Gerth fails to teach that at least one heat conductor comprises a polygonal, semi-circular, or irregular cross-section. As claim 2 depends from the amended claim 1, and claim 1 is believed to be new and nonobvious in view of Gerth, claim 2 is also believed to be allowable at least because of its dependence therefrom.

Claim 6 is rejected as being obvious over Gerth in view of Cheon. With regard to claim 6, Gerth allegedly discloses the system of claim 1. The Office Action recognizes that Gerth fails to teach that the heat sink comprises a plurality of thermally conductive blocks coupled to the first side of the mounting plate, or a solid thermally conductive block coupled to the first side of the mounting plate. The Office

Action alleges that Cheon discloses a heat sink that comprises a plurality of thermally conductive blocks.

Claim 6 depends from the amended claim 1, and claim 1 is believed to be new and nonobvious in view of Gerth. The combination of Gerth and Cheon does not render claim 1 obvious, and therefore claim 6 is also believed to be allowable at least because of its dependency on claim 1.

Claim 14 is rejected as being unpatentable over Gerth as applied to claim 1 above, and further in view of Dilick. With regard to claim 14, the Office Action alleges that Gerth discloses the system of claim 1. The Office Action recognizes that Gerth fails to teach a dielectric fluid comprising at least one of petroleum or silicone. According to the Office Action, Dilick teaches that a fluid of petroleum derivative is suitable for use as insulating fluid for an x-ray tube.

Claim 14 depends from the amended claim 1, and claim 1 is believed to be new and nonobvious in view of Gerth. The combination of Gerth and Dilick does not render claim 1 obvious, and therefore claim 14 is also believed to be allowable at least because of its dependency on claim 1.

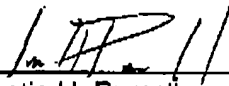
**Conclusions:**

In view of the aforementioned remarks, it is respectfully submitted that all pending claims are in a condition for allowance. A notice of allowability is therefore respectfully solicited. Please charge any fees required in the filing of this amendment to Deposit Account 07-0845.

Should the Examiner have any further questions or comments please  
contact the undersigned.

Respectfully submitted,

By: \_\_\_\_\_

  
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